

**In the Specification:**

Please replace the paragraph beginning on page 6, line 7 with the following amended paragraph:

**FIG. 3** provides a functional system diagram of relevant portions of the motor control circuitry **232** of **FIG. 2**. **FIG. 3** is also a system diagram of the preferred embodiment current control circuit **300**. The current control circuit **300** includes a power supply **302** which is provided by a host computer system (not shown). The power supply **302** powers a spindle motor **304** by way of motor drivers **320**. The motor drivers **320** are controlled by spindle driver control logic **322** with an associated programmable timer/counter circuit **324**. The voltage across current sensing resistor **306** is measured when the calibrating switch **314** is not enabled. Calibrating switch **314** may be enabled during the power-up procedure of a drive.

Please replace the paragraph beginning at page 7, line 27 with the following amended paragraph:

The voltage comparator **318** is preferably a one-shot comparator which starts a the programmable timer/counter (not shown) circuit **324** to disable the motor drivers **320** when the voltage at the ~~capacitor's **312** terminals~~ terminals of the capacitor **312** exceeds the voltage provided by the DAC **310**. The motor drivers **320** are then ~~disable~~ disabled for a programmed amount of time before the cycle repeats. The cycle is repeated by re-engaging the motor drivers **320**.

Please replace the paragraph beginning on page 9, line 1, with the following amended paragraph:

In step **510**, the process disables the motor drivers **320**. This is preferably done by sending a disable signal to the spindle driver control logic ~~(not shown)~~ **322** ~~in the motor control circuitry 232~~. After step **510** is complete, the routine proceeds with timing delay **512**. The routine counts the amount of time on step **512** until a preprogrammed time has passed. When the preprogrammed time has passed the process enables the motor drivers **320** in step **514**. Re-enabling the motor drivers **320**, step **514**, may also include re-enabling voltage to the motor **304**. After the drivers **320** are enabled, the process repeats back to the measure voltage step **504**. In the preferred embodiment, the measure voltage step **504** also includes monitoring the motor velocity and adjusting the DAC **310** reference voltage according to a velocity dependent reference profile, such as **400**.